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July 19, 1985

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JULY 19, 1985 VOL. 228, NO. 14

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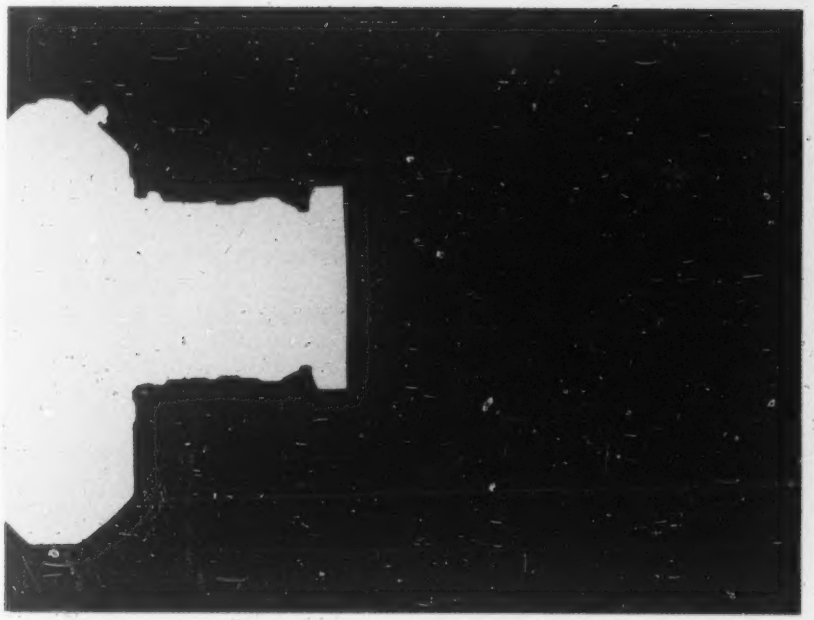

Editorial 5
The bright side, from the right side.

Newswatch 11
Beyond Hughes and Saturn, GM's goal still is to build better cars.

Machine Tool Report 18
FMS still a long way from worldwide use.

Diagnostics And Sensing Systems 20
Plan carefully before you board the vision system bandwagon.

Financing 28
Cash shortage need not deter expansion plans.

Tungsten 36
The metal's hard pressed because of a conflict over imports

Materials Report 45
Steelmakers anticipate a mild summer decline in orders.

Price Trends 52
Prices were on an even keel in May.

Next Issue: Materials Selection Guide.

Departments

EDITORIAL STAFF	8
PRODUCT & EQUIPMENT REVIEW	41
AD INDEX	42
BUSINESS STAFF	42
MANAGEMENT SERVICE CARD	43
P&P DATA 6/24	47
FERROUS SCRAP 6/24	48
CLEARING HOUSE	50

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CASH SHORTAGE NEED NOT STOP EXPANSION

Creative financing, a term that means anything other than cash, is now the way of life in America when it comes to buying plant and equipment. Many firms lease but there are many other sources.

BY GEORGE A. WEIMER

Business intends to spend $386.1 billion for new plant and equipment in 1985, which is 9.2 pct more than in 1984, according to a survey conducted in April and May by the Commerce Department's Bureau of Economic Analysis. Spending in 1984 was an estimated $353.5 billion, up 16.0 pct over 1983.

An ever increasing portion of spending on plant and equipment will come out of "creative financing," a term that means anything other than cash. In fact, cash is fast becoming a rare way to put in a new machine let alone a new plant.

"There are still a few companies that use cash to pay for modernizations and expansions, but only a few," said Ameritrust vice president Ronald W. Kruse. One major trend, he added, is "the ever increasing use of leasing."

Banks and manufacturers became very interested in this approach in the early 70s as business schools taught the techniques more clearly and as inflation became more promi

Where Business Borrows

(Billions of Dollars)

	1980	1981	1982	1983	1984E
Business Fixed Investment	308.8	352.2	348.3	348.3	400.0
• Structures	110.9	133.4	141.9	131.1	142.5
• Producers' Durable Equipment	197.9	218.8	206.4	217.2	257.5
Selected Sources of Funds					
• New Equipment Leasing	43.5	55.5	57.6	61.2	74.4
• Corporate Equities	12.9	−11.5	11.4	28.3	7.7
• Corporate Bonds	32.9	35.6	34.0	24.4	38.3
• Commercial Mortgages	20.7	−1.1	−0.2	2.9	1.4
• Commercial Bank Loans	29.3	42.8	41.5	17.0	61.0
Selected Sources as Percent of Business Fixed Investment					
• New Equipment Leasing	14.1	15.8	16.5	17.6	18.6
• Corporate Equities	4.2	−3.3	3.3	8.1	1.9
• Corporate Bonds	10.7	10.1	9.8	7.0	9.6
• Commercial Mortgages	6.7	0.3	−0.1	0.8	0.3
• Commercial Bank Loans	9.5	12.2	11.9	4.9	15.2
Selected Sources as Percent of Producers' Durable Equipment					
• New Equipment Leasing	22.0	25.4	27.9	28.2	28.9
• Corporate Equities	6.5	−5.3	5.5	13.0	3.0
• Corporate Bonds	16.6	16.3	16.5	11.2	14.9
• Commercial Mortgages	10.5	−0.5	−0.1	1.3	0.5
• Commercial Bank Loans	14.8	19.6	20.1	7.8	23.7

Source: Compilation and calculations by Brimmer & Company, Inc. Data on business fixed investment from U.S. Department of Commerce, Bureau of Economic Analysis. Data on sources of funds from Data Resources, Inc., based on Flow of Funds data from the Board of Governors of the Federal Reserve System. Data on equipment leasing calculated by Brimmer & Company, Inc., based on the American Association of Equipment Lessors Annual Survey, 1980, 1981, 1982, 1983.

E = Estimate

nent, he explained. Still "leasing doesn't fit when the asset involved diminishes in value quickly, such as was the case of some computers," Mr. Kruse noted.

For purchases of capital goods, however, the leasing approach has radically and pervasively changed the way business invests.

"Equipment leasing is the most important financing alternative available in the U.S. today and is rapidly becoming so in all global markets," said Bernard J. McKenna, president and CEO, Sanwa Business Credit Corp., a subsidiary of Sanwa Bank Ltd., Chicago.

"Three major elements stand out when discussing market changes. These elements are the financial sophistication of customers, the high tech nature of the majority of equipment being financed by leasing companies, and the rise to preeminence of the service industries in the American economy," Mr. McKenna added. It is noteworthy that Mr. McKenna is also the current chairman of the American Association of Equipment Lessors (AAEL) Arlington, Va.

"The high tech nature of the equipment primarily financed by leasing companies has had an impact on the market in recent years. For the last ten years, high tech equipment and computers have been the "The Golden Boys" of leasing in the U.S. This equipment will continue to be important for leasing, but growth is also expected in the leasing of telecommunications equipment such as cellular telephones and of equipment used for electrical and steam generators.

"The increased activity in the leasing of high tech equipment is due in part to the risk of obsolescence. What may be state-of-the-art today may become worthless in five years due to technological improvements. Leasing companies are able to assume this risk selectively due to their experience in the evaluation and remarketing of equipment," the Sanwa president said.

"A leasing company that knows its equipment can predict its resale value with a confidence that allows it to offer its customer a lower rental rate. The intense competition present in the leasing industry demands that the lessor be up-to-date in its knowledge of the equipment it leases. In-house expertise is a must for all companies with assets over $50 million," he advised.

A Competitive Environment

Another area of major change in the leasing industry is in the financial environment. In recent years a number of actions have been taken by the United States' government that have continued the deregulation of the financial services industry. "Lessors are now able to do more. However, other financial-service providers can now play our game more easily. With the ease of entry-into and exit-from the industry, competition has increased dramatically in recent years. This increased competition has had an impact on rates and elevated the level of information about leasing available to lessees," Mr. McKenna said.

"With the continued removal of legal constraints on banks and other financial institutions from entering new financial activities, we have seen savings and loans enter into commercial loans and leasing, industrial firms purchase or establish banks, and banks enter into the insurance and securities business."

Growth in participation by non-financial companies has helped to blur distinctions among traditional financial products and product providers. The effect of new entrants in the leasing market has been magnified by a growing trend towards product diversification by established lessors as new opportunities are identified in a rapidly changing environment. These new opportunities have been created by tax law changes and customer needs.

"The leasing industry has responded to these challenges and through its creativity has developed such tools as the leveraged "trac" lease (for trucks and cars), leveraged joint ventures (both for large balance investors and vendors), residual value insurance and the use of interest rate and currency swaps in order to remain flexible and meet the needs of its customers," Mr. McKenna noted.

In the past four years the United States leasing industry has experienced four major tax changes. Tax reform is now a major issue in the United States Congress.

Based on a study of the original treasury tax proposal by Data Resources, Inc., Mr. McKenna noted that "we can extrapolate a rise in the cost of acquiring equipment of about 10.5 pct." This opinion is supported by businessmen as evidenced in a survey conducted by National Attitudes, Inc. The survey showed that for a large majority of businessmen, current tax credits and depreciation had a positive effect on their decision to acquire new equipment," Mr. McKenna added.

"Leasing is the growth business of the eighties and will continue to dominate the way assets are financed. Leasing in the U.S. existed before the investment tax credit (ITC) and the present depreciation provisions, and will continue to exist because of the creative minds in the industry," he concluded.

Uncertainty Brings Indecision

The possible end of investment tax credit has created quite a stir in both manufacturing and financial circles. Harold C. Hunter, Jr., president of Republic National Leasing Corp., Dallas, Tex., reflected the views of most in industry when it comes to that one aspect of "Treasury II."

The two features of "Treasury II" that will have the most significant impact on equipment leasing are the repeal of investment tax credits and replacement of ACRS with CCRS, Mr. Hunter predicted.

"The ultimate result of repealing investment tax credits and reducing available equipment write offs will be that rental rates will go up. The increase in rates will be significant when compared with leases under current law where investment tax credits are available to the lessor, and less significant where investment tax credits are not assumed in lessor pricing.

"Even with this increase, implicit rental rates will remain less costly

A GLOSSARY OF LEASING TERMS

Accelerated Cost Recovery
The depreciation schedule of the Economic Recovery Tax Act of 1981 (ERTA), modified by the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA), that allows faster write offs of plant and equipment capital costs.

Bargain Purchase Option
A lease provision allowing the lessee, at its option, to purchase the equipment for a price predetermined at lease inception that is substantially lower than the expected fair market value at the date the option can be exercised.

Bargain Renewal Option
A lease provision allowing the lessee, at its option, to renew the equipment lease for a rental rate predetermined at lease inception that is substantially lower than the expected fair market value at the date the option can be exercised.

Capital Lease
Type of lease classified and accounted for by a lessee as a purchase and by the lessor as a sale or financing, if it meets any one of the several criteria.

Closed End Lease
A true lease in which the lessor assumes the depreciation risk. The lessee bears no obligation at the end of the lease. This term is used to distinguish the lease from an open end lease.

Conditional Sale
Also known as a security agreement. An agreement with an option to purchase the leased property at the expiration of the lease at a bargain purchase price.

Effective Lease Rate
The effective lease rate (for the lessee) of the cash flows resulting from a lease transaction.

Fair Market Purchase Option
An option to purchase leased property at the end of the lease term at its then fair market value.

FASB 13
Statement issued by the Financial Accounting Standards Board establishing financial accounting standards for lessees and lessors.

Full Payment Lease
A lease in which the cash flows will return to the lessor the acquisition cost of the asset, financing, overhead with an acceptable ROI.

Guideline Lease
A lease written under criteria or "guidelines" established by the IRS to determine the availability of tax benefits to the lessor.

Leveraged Lease
In this type of lease, the lessor provides an equity portion (usually 20 pct to 40 pct) of the equipment cost and lenders provide the balance on a nonrecourse debt basis.

Master Lease
A contract where the lessee leases currently needed assets and is able to acquire other assets under the same basic terms and conditions without negotiating a new contract.

Net Lease
A lease where lease payments paid to the lessor do not include insurance and maintenance, which are paid separately by the lessee.

Nonpayout Lease
A lease in which the cash flows will not be sufficient to cover the full costs of the equipment, financing, and administration and provide a satisfactory return.

Operating Lease
An operating lease is any lease which is not a capital lease.

Present Value
The current equivalent value of payments or a stream of payments to be received at various times in the future.

Safe Harbor Lease
The temporary type of tax-oriented lease established by Congress in the Economic Recovery Tax Act of 1981 (ERTA) and subsequently amended by the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA).

Tax Benefit Transfer (TBT)
A specific type of lease transaction under safe harbor that allows an owner to sell equipment and the associated tax benefits for an amount equal to 10 to 25% of the equipment's cost to a nominal lessor who leases the equipment back to the former owner.

Tax Lease
A lease where the lessor recognizes the tax benefits of ownership resulting from depreciation and/or investment tax credit; generally, the lease rate factor on tax leases is reduced to reflect the lessor's recognition of these tax benefits.

True Lease (for Tax Purposes)
A "true lease" is a term for defining types of transactions which qualify as leases under the Internal Revenue Code so the lessor can claim tax benefits of ownership such as depreciation and ITC, and the lessee can claim rental payments as tax deductions.

Vendor Lease
A lease wherein an equipment manufacturer or distributor has its own leasing company or an agreement with a leasing company to offer lease financing as a sales aid.

Wrap Lease
A lease in which a lessor sells the leased equipment to a third party (an equity investor) who then leases the equipment back to the lessor for a longer term than the user lease.

Source: American Association of Equipment Lessors

than comparable loan costs. Other key advantages will remain intact such as 100 pct financing, fixed-rate, term-related to asset life and transfer of residual risk to lessor.

"As a byproduct of the higher rates, it will be more difficult to achieve 'operating lease' off balance sheet treatment under FASB 13," he added.

"If enacted, we believe that Treasury II will have a somewhat dampening influence on middle market leasing volumes. However, this will be more due to general reductions in the level of capital expenditures than to any specific impact of the proposed changes on leasing per se.

"Big ticket leverage leases may be more seriously affected due to their greater tax sensitivity and reliance on debt to achieve maximum economic advantage," Mr. Hunter told *Iron Age*.

"In total, leasing will remain a viable and attractive means of financing equipment for many companies. However, because lease rates will move closer to loan rates, both lessors and lessees will have to focus even more carefully on anticipated equipment values at lease expiration in order to arrive at optimal economic decisions," Republic National's president predicted.

Lease financing has expanded to the point where it is the most important single source of funds to support business expenditures for capital equipment, said a report published by Brimmer & Co., Inc., Washington, D.C. For example, spending on business fixed investment amounted to $348.3 billion in 1983. This total was divided into outlays for structures, at $131.1 billion, and producers' durable equipment, at $217.2 billion. In the same year, equipment leasing is estimated at $61.2 billion. At this level, lease financing was equal to 17.6 pct of total business fixed investment. It also represented 28.2 pct of outlays for producers' durable equipment.

Leasing Meets Business' Needs

During the last few years, leasing has risen faster than total capital expenditures. Lease financing as a proportion of the latter climbed from 14.1 pct in 1980, to 16.5 pct in '82, and to 17.6 pct in '83.

These estimates suggest that leasing is a more important source of funds to meet business capital requirements than either new equity issues, corporate bonds, commercial bank loans, or commercial mortgages. Leasing is consistently higher than is business borrowing through corporate bond issues or commerical bank loans, and it greatly exceeds funds raised through the issuance of new equities, Brimmer & Co. pointed out to *Iron Age*.

Other forms of creative financing include Industrial Revenue Bonds (IRB's) and Urban Development Action Grants (UDAG's). These are Federally encouraged tax benefit options companies may use to build new plants or refurbish old plants with the two-fold goal of increasing productivity and employment. Both require cooperation among manufacturers, municipal authorities, and lending institutions.

The IRB route has been used four times by Hill Acme, noted company treasurer Theodore S. Sosnowski, and each time with very good results. He offered the following advice to any company that is considering the IRB approach to growth for the first time.

"First talk to your lending institution. Then start with a good attorney who has written IRB business. This can be very beneficial because it keeps you from wasting time. Legal firms specialize in this.

"But, be prepared to review the documents yourself," Mr. Sosnowski warned.

Gotta Do your Homework

An IRB can be a lease or a loan and there are variations in methodology state-by-state. The essential point is to "do your homework. You'll be reviewed by some municipal body before you can move ahead with the lendor.

"Establishing a fixed fee with the law firm is also a good idea," he advised. But, "do a lot of the research on your own. This can easily save $10,000 to $15,000 on a $1 million or less IRB.

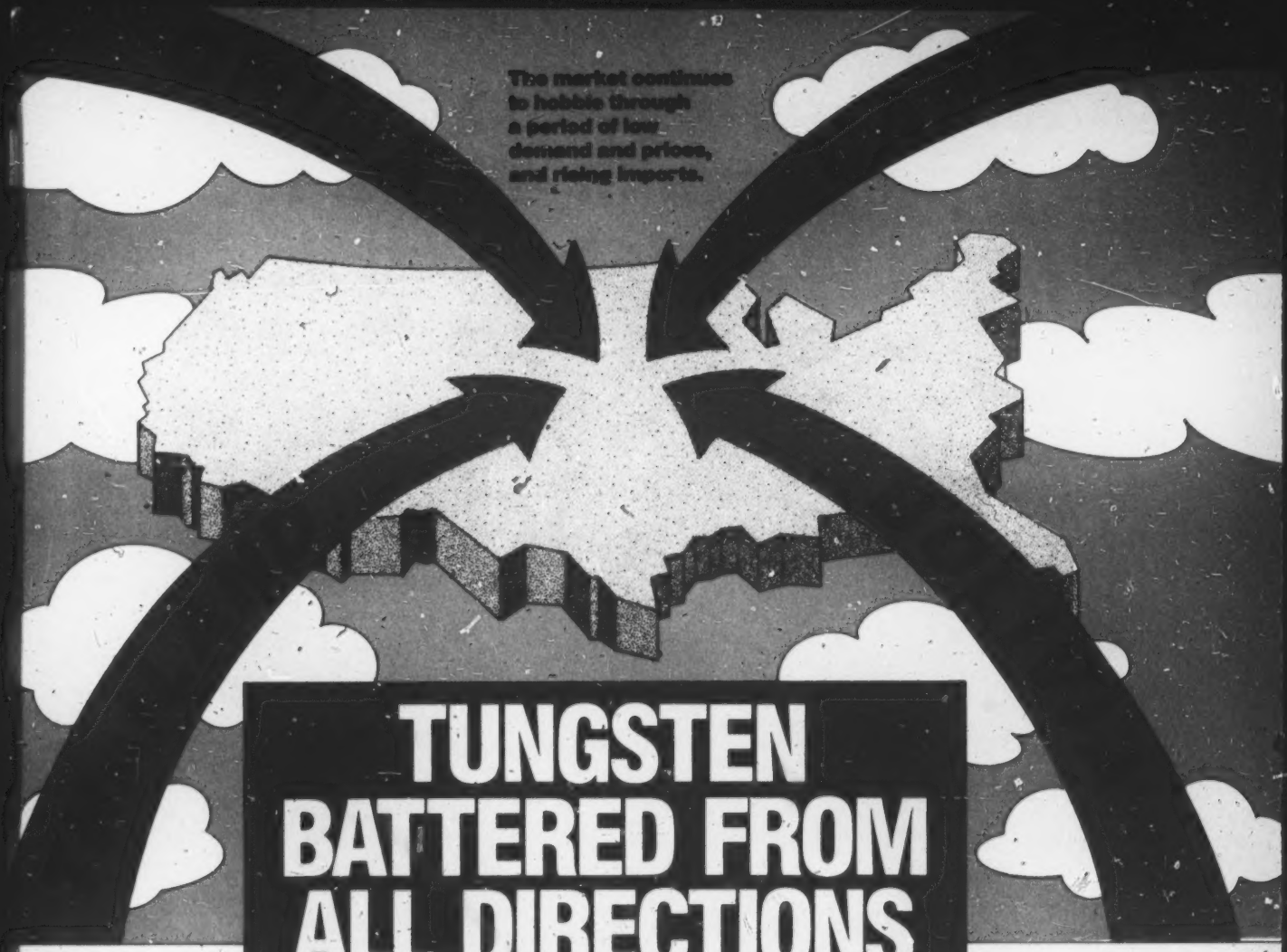
"Keep in mind that under the IRB rules, you cannot purchase anything until final approval is granted by the appropriate authorities."

The attraction of an IRB is, of course, a lower interest rate for the borrower and a tax advantage for the lender. "A company, particularly a small company looking to expand, should definitely consider the IRB approach. Don't be intimidated by the fact that this involves local government and a great deal of legal help. Don't be shy," advises Mr. Sosnowski. In his opinion, IRB's are an excellent route to expansion. However, he adds, "do your homework and don't leave it all up to the lawyers."

The limit on IRB's is $10 million and is clearly designed to aid smaller companies in urban areas to increase employment. However, larger manufacturers have used the technique quite successfully.

According to Hill Acme's treasurer, his company's new fine strand brass forging rod caster would not have been built in Cleveland without an IRB.

IRB's were designed to enable municipalities to provide low-cost financing to stimulate private investment in projects that promote local economic development, Manufacturers Hanover Leasing Corp. said. While IRB's in themselves do not constitute a lease product, the two are often used in conjunction to provide full financing for plant and equipment. Many IRB's are exempt small bond issues with a $10 million ceiling placed on the bond proceeds and capital expenditures of the project. Since many projects today need to make expenditures which exceed that limit, a leasing arrangement can be used to protect the tax exempt status of the IRB financing because a properly structured lease will not be considered a capital expenditure for purposes of the $10 million ceiling, Manufacturers Hanover Leasing Corp. added. Clearly, financing expansion has come a long way from a check and a handshake. But, one factor remains eternal in terms of investment: The return. Cash may be obsolete; return on investment is not. □



TUNGSTEN BATTERED FROM ALL DIRECTIONS

The tungsten market has taken on some of the aspects of a three-legged potato race with some players running off in all directions and others running in place.

Some imports-beleaguered domestic producers have asked the Congress to lift the import duty on tungsten concentrates from Canada, China and Australia for three years.

Some domestic producers and processors, meanwhile, have asked the Administration to persuade China to cut shipments of ammonium paratungstate (APT), an upgraded tungsten product, to the U. S. market. The Refractory Metals Association wants the request reinforced with an anti-dumping complaint or legislative remedy.

Nine foreign tungsten producer/exporting countries are preparing for a September meeting in Bangkok where another attempt will be made to establish some sort of formula for a minimum price level.

The U. S. General Service Administration, which had its tungsten stockpile sales program sheared by Congress late last year, is preparing to ask Congress for authority to sell more surplus tungsten once its current program is completed.

Meanwhile, the tungsten market overall continues to hobble through unspectacular demand levels, low prices, competitive marketing by foreign producers and, in the U. S., a dormant mining industry cramped by imports and stockpile sales.

Incentives Dwindling

With prices for wolframite (which with scheelite is a raw material for producing tungsten) down to the lowest levels in more than 10 years, incentives to mine are dwindling. Amax Inc., has closed its Climax molybdenum mine in Colorado through early September, which also means no wolframite production either, and Billiton Canada Ltd. decided on permanent shutdown of its Mt. Pleasant tungsten-molybdenum mine in New Brunswick on July 31. Union Carbide Corp., closed its Bishop, Calif. scheelite mine last April.

Why should domestic producers want the tariff suspended on concentrates (it's currently 17¢ per lb of tungsten contained) when concentrates still make up the bulk of imports (80 pct last year) that account for the great bulk of domestic consumption? There is no altruism here, but there are some hardnosed reasons. For one thing, there is concentrates brought in from mines in which U. S. firms have an interest, The Amax Inc. 57 pct interest in Canada Tungsten Mining Corp. of Vancouver being a good example.

For another, there is the possibility that this could head off rising imports of such value-added products as APT and other compounds and powders. Some overseas suppliers, notably China and Korea, have shifted their emphasis to APT in more recent years with added impact on domestic companies both

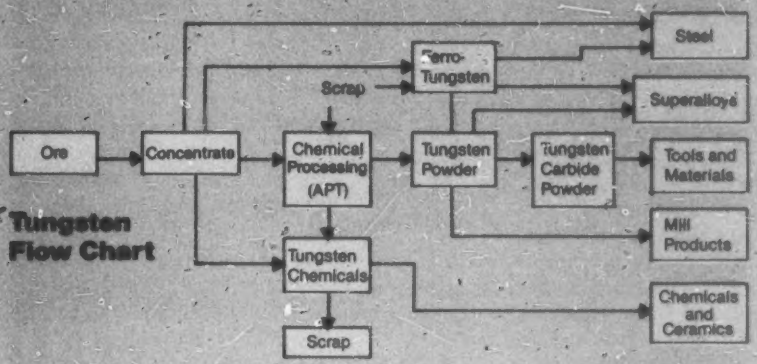
U.S. Imports of Tungsten

Thousand Lbs of Contained Tungsten in Concentrate, APT, Compounds

Year	Total	Canada	China	Bolivia	Thailand	All Others
75	7,287	1,600	310	787	829	3,961
76	5,597	1,343	377	580	588	2,709
77	7,289	2,046	466	1,581	519	2,677
78	9,653	3,030	714	2,012	858	3,039
79	11,823	3,129	1,168	2,980	1,246	3,300
80	11,901	2,914	2,048	2,794	1,046	3,099
81	12,828	2,005	3,319	2,511	706	4,287
82	10,012	2,776	2,461	1,418	295	3,062
83	8,082	1,432	665	1,459	313	4,213
84	15,986	3,227	2,298	329	1,706	8,426

Sources: Bureau of Mines, UNCTAD, industry sources

The trend in imports has included a shift toward more APT and other value-added forms. These accounted for 19.9 pct of total imports last year compared with 4.4 pct in 1980. Major suppliers in the "others" column include Peru, Portugal, Korea, Mexico and — because of a surge in 1984 — Australia. The 2,986,000 lbs of contained tungsten imported from Australia last year exceeded the total imported since 1970 by 44,000 lbs and 97 pct of the 1984 total was in concentrates.



Tungsten Flow Chart

Product	Pct	Form Desired
• Carbide	65	Powder
• Alloy	15	Ferrotungsten
• Metal	15	Powder
• Compounds/Chemicals	5	APT

price wise and in terms of concentrates processing. Nearly 20 pct of U. S. imports last year were APT and other value-added items, compared with 4.4 pct in 1980. If the duty suspension reverses this trend there could at least be some benefit for domestic processors.

C. Eric Ho, president of Amax Inc.'s tungsten division, said the main reasons for suspending the duty are that the U. S. is a net importer of tungsten concentrates "to the tune of 65 to 85 pct in recent years so, obviously, we need to import — and the U. S. is the only country in the Western world with a tariff on tungsten concentrates. Besides, who really pays the duty anyway? It's people who make and use tungsten products and the duty makes them less competitive."

Mr. Ho said a request to suspend the duty would have been made sooner, but not all producers/processors were agreeable. Union Carbide Corp., which recently closed down its Bishop, Calif. tungsten mine and which has had its Emerson, Nev. mine down since 1983, has decided not to oppose the move. Union Carbide doesn't produce tungsten outside the U. S. but it does import some raw materials for processing here.

George M. Lincoln, Jr., product director-tungsten for Union Carbide's Umetco Minerals Corp. subsidiary, noted that not all exporters were paying the duty anyhow. Developing countries qualifying under the General System of Preferences, such as Bolivia, Brazil and Thailand, paid no duty while suppliers like China, Canada and Australia pay a duty. (Canada and Australia accounted for nearly 48 pct of contained tungsten imports last year, predominately concentrates, while China and Korea accounted for 19.5 pct, predominately APT).

Mr. Lincoln said the duty suspension isn't likely to have much effect on Chinese shipments of APT to the U. S. market. He said Chinese APT is coming in at $90 per short ton unit and that works backward to a concentrate price of about $50. "In a normal world — if there is such a thing — if you calculate a conversion cost in the U. S., which ranges from $30 to $35 per short ton unit, allow for 4 pct yield loss, and apply it to the going world price (about $70) you have an APT price range of about $103-$108. Or, look at it another way — the Chinese APT works backward to a concentrates price of about $50 — what they are doing is discounting concentrates. So, it (the duty suspension) will have no effect on imports of APT from China."

Late last year, Mr. Lincoln told a Northwest Mining Association convention in Spokane that the Chinese accomplished their 1981-84 shift from concentrates to APT and oxide "in spite of a 17¢ a lb tariff on concentrates vs an APT tariff of 11.2 pct (and) the pricing implications are obvious."

The duty on APT this year was lowered to 10.8 pct and it is due to drop to 10 flat in 1987. Said Mr. Lincoln, "we can live with that, but we would fight to the death any attempt to lower or eliminate it. Our main concern is the discounting of concentrates."

When Congress last September changed the GSA's authority to sell tungsten concentrates, there was some initial confusion as to whether the restriction was an annual cap of 2.4 million lbs from 6 million lbs a year previously, of to 2.4 million lbs and no more.

"It's 2.4 million lbs — period," said Mr. Ho of Amax, who also acknowledged that Amax was among domestic companies who purchased GSA material for their own needs. He also noted that some recent GSA offerings were virtually ignored "and that should give them some indication of how weak the market really is."

Mr. Lincoln said even the whittled down GSA program should be put into perspective. While the 2.4 million lb limit is a one-time thing, it's still better than 10 pct of annual

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domestic concentrates consumption, he said, adding that "it isn't just a matter of market share — it's the way it is done. Back in 1983, for instance, GSA sold 1.1 million lbs, equal to 9.6 pct of total concentrate use. That's not bad, you might say, but check the timing. All of it was offered in the second half, so the impact is greater. In fact, fourth quarter awards hit 813,000 lbs, so now you're talking 28.5 pct of the available market — and that is what killed the rebound (that year)."

Queried about the early confusion over the stockpile release program, a GSA spokesman said "it's our understanding that Congress authorized the sale of 2.4 million lbs beginning with the start of the current fiscal year (Oct. 1, 1984) with no time limit. The law canceled all previous authorizations, i.e. the 6 million lbs a year, and we plan to ask Congress for authority to dispose of the excess in the stockpile."

Asked how sales were so far, he said "we sold 622,571 lbs through February—and nothing in March." The GSA spokesman said there is about 29 million lbs of surplus material left, of which about 27 million lbs "is not stockpile quality, but quite usable by industry."

GSA Cash Drawer

There could be a crimp in GSA sales of stockpile surpluses in general if Official Washington continues to tarry with the National Security Council stockpile study, which reportedly recommends limiting the stockpile to the more exotic materials. GSA's cash drawer is nearing the $250 million cap for the current fiscal year and purchases are on hold pending definition of future stockpile goals.

While U. S. tungsten producers and consumers are wrestling with the implications of changing stockpile thinking and altered tariff schedules, busy overseas producers and exporters are preparing for another go at building a floor under a price structure.

Representatives from Australia, Brazil, Bolivia, Peru, Portugal, Thailand, Zaire, France and China held a preliminary meeting in Bangkok in mid-March. The group didn't form a formal association, but it did agree to meet again, in the same place, to see if an accord can be reached to set an $80-85 per short ton unit floor price.

Said Mr. Ho of Amax, "they've been trying for years to set up some sort of organization, but they haven't been successful so far."

$100 Floor Price

Mr. Lincoln said the group's chances of establishing a viable floor price "ranges from zilch to nil. They've been trying to do it for years without success. There's too much variation in mining costs and grades of materials. Anyhow, $80-85 is not a realistic floor level; it doesn't reflect mining, development, exploration and business costs." A realistic number, Mr. Lincoln said, would be closer to $100.

Asked how tungsten business looks, Mr. Lincoln said "we could stay even with 1984 (which at least was better than the 82-83 slump) but there is some concern about the oil and gas market starting to drop—it's the old double-whammy: a decline in drilling rigs operating and shallower wells."

Mr. Ho said there should be some improvement in the tungsten market this year, "especially if everybody remains level-headed. You're always afraid some unprofessional player—company, country, agency—is going to tip the boat."

Mr. Lincoln rated the main problems as Chinese APT sales and U. S. stockpile release policy. "Remember, that 12.2 pct market share (taken by China) last year is the total market. Against the market (separating consumers like GE and Sylvania who bring in their own concentrates or APT) it's more like 23 pct."

Back in 1982, another Union Carbide tungsten official had called attention to the sharp rise in Chinese shipments of APT and other value-added forms and added, somewhat rhetorically, that "one has to question how long it will be until the Chinese are exporting cutting tools to the U. S. market." □

PRICE & PRODUCTION DATA

(Effective June 24, 1985)

Steel production by districts, thousands of tons (000 omitted)

	Last Week	Two Weeks Ago	Month Ago	Year Ago
Northeast Coast	188	186	172	230
Pittsburgh	224	231	236	231
Youngstown	100	80	102	99
Lake Erie	118	141	158	127
Detroit	117	162	152	163
Chicago	455	492	482	487
Cincinnati	90	95	94	109
St. Louis	79	76	66	79
Southern	206	235	253	209
Western	94	99	98	90
U.S. Production	1,671	1,797	1,813	1,824

Source: American Iron & Steel Institute

Lake Superior Ore Prices

51.50% Fe Natural delivered lower Lake ports. Rail transportation, handling and unloading may be charged to the account of the buyer. Coarse ore 80¢ premium.

Pellets (per iron unit natural) ..... gross-ton 80.50-86.9*
Mesabi, regular-unscreened ..... gross-ton $32.53
Mesabi, non-bessemer ..... gross-ton $30.03-31.53**

*80.50¢—Pickands Mather as of 1/27/81.
86.9¢—U.S. Steel as of 3/15/82, Cleveland-Cliffs as of 2/26/82, Oglebay Norton as of 3/25/82, and Hanna Mining as of 2/26/82.
**Effective 8/1/83.

STEEL PRODUCTION, COMPOSITE PRICES

(Effective June 24, 1985)

U.S. Steel Production	Last Week	Two Weeks Ago	To Date 1985	To Date 1984
Net tons, in thousands	1,671	1,797	43,439	48,980
Capability Utilization Rate	65.1	70.0	68.2	76.1

Composite Prices	This Week	Week Ago	Month Ago	Year Ago
Finished Steel Base* (¢/lb.—eff. 7/1/84)	27.582	27.582	27.582	27.405
Pig Iron** (Net ton = 2000 lbs.)	$213.00	$213.00	$213.00	$213.00
Scrap No. 1 hvy.*** (Gross ton = 2240 lbs.)	$ 66.17	$ 66.17	$ 70.17	$ 85.17
No. 2 bundles	$ 47.17	$ 47.17	$ 49.17	$ 56.17

Scrap Comparison (Gross Ton)

No. 1 steel, Pittsburgh	$ 70.50	$ 70.50	$ 72.50	$ 94.50
No. 1 steel, Philadelphia	66.50	66.50	69.50	80.50
No. 1 steel, Chicago	61.50	61.50	68.50	80.50
No. 1 bundles, Detroit	59.50	59.50	64.50	82.50
Low Phos., Youngstown	57.50	57.50	57.50	89.50
No. 1 mach'y cast., Pgh	71.50	71.50	71.50	79.50
No. 1 mach'y cast., Phila	91.50	91.50	91.50	98.50
No. 1 mach'y cast., Chi	99.50	99.50	108.50	117.50

*Finished Steel Composite. Weighted index of steel bars, shapes, plates, wire, rails, black pipe, hot and cold rolled sheets and strips.
**Pig Iron Composite. Based on average prices for basic and foundry pig iron at representative producing points within the U.S.
***Steel Scrap Composite. Average of No. 1 hvy. melting steel scrap and No. 2 bundles delivered to consumers at Pittsburgh, Philadelphia and Chicago.

NONFERROUS PRICES

(Effective June 24, 1985) Prices obtained in trade based on representative tonnages per gross ton delivered to consumer unless otherwise stated.

Primary Metal Prices

(cents per lb.)	current price	last price	date of change
Aluminum (LME)	46.70	46.91	6/24/85
Copper (C)	66.50-68.00	66.00-68.00	6/24/85
Lead	19.00-20.00	20.00-21.00	6/3/85
Magnesium Ingot	148.00	143.00	5/25/84
Nickel (LME)	253.49	252.14	6/24/85
Titanium Sponge	555.00-585.00	555.00	4/29/82
Zinc	44.00-47.00	46.00-47.00	6/11/85

ALUMINUM: Avg. for last week & previous week. COPPER (C): = cathode. LEAD: common grade. MAGNESIUM: 99.8% pig delivered. NICKEL: Avg. for last week & previous week. ZINC: high grade.

Antimony, American Laredo, Texas	$2.00
Beryllium-aluminum 5% Be, per lb. contained Be	$230.00
Beryllium-copper, per lb. cont. Be	$144.00
Beryllium 97% powder 200	$178.00
Cadmium, ton lots	$1.25-1.55
Calcium, ton lots, crown	$3.76
Chromium, 99.8%	$3.75
Cobalt, 99%, cathode	$12.50
Gold per troy oz.	$314.65
Indium, dollars per troy oz.	$2.50
Iridium, dollars per troy oz.	$440.00
Magnesium sticks, 10,000 lbs.	$2.02
Mercury, per 76-lb. f.o.b. N.Y.	$305.00-315.00
Molybdenum, lb. tech. moly oxides, 20 lb. MO can	$6.85
Nickel electro (PDCR)	$3.29
Palladium, per troy oz.	$101.00
Platinum, per troy oz.	$275.00
Rhodium, per troy oz.	$700.00
Silver ingots, per troy oz.	$6.145
Vanadium	$6.00
Zirconium sponge	$12.00-17.00

(Per lb. unless otherwise noted)

Straits Tin Price

(U.S. cents per lb. EX-SMELTER, based on daily market in Penang in Malaysian dollars per kilo.)

June 17—541.95
June 18—545.52
June 19—Holiday
June 20—Holiday
June 21—Holiday

Scrap Prices
Brass Mill Scrap

(Cents per lb.; over 20,000 lbs. add 1¢ per lb.)

	Solids	Turnings
Copper	61	47
Yellow brass	55⅜	49¾
Red brass	57⅞	47¼
Comm. bronze	59	47½
Mang. bronze	48¾	47¾
Free cutting rod ends	49	50

Custom Smelters Scrap

(Cents per lb., carload lots, del. refinery)

No. 1 copper wire	56
No. 2 copper wire	47
Light copper	38

Ingot Makers Scrap

(Cents per lb., carload lots, del. refinery)

No. 1 copper wire	52
No. 2 copper wire	43
Light copper	34
No. 1 composition	46
No. 1 comp. turnings	44
Hvy. yellow brass solids	33
Hvy. yellow brass turnings	30
Radiators	35

Aluminum		
New mixed clips	32	— 33
Old sheet	29	— 30
Old cast	29	— 30
Clean dry borings	30	— 31

Dealers' Scrap

(Dealers' buying price f.o.b. New York in cents per pound)

Aluminum		
Segregated clippings	26	— 27
Mixed L.C. clips	23	— 25
Old sheets and cast	20	— 22
Borings and turnings	17	— 19
Duraluminum clippings	24	— 25

Copper and Brass		
No. 1 copper wire	45	— 46
No. 2 copper wire	37	— 38
Light copper	32	— 33
Radiators	30	— 31
No. 1 composition	39	— 40
No. 1 composition turnings	36	— 37
Cocks and faucets	28	— 29
Clean heavy yellow brass	27	— 28
Brass Pipe	28	— 29
New soft brass clippings	39	— 40

Lead		
Heavy soft lead	6	— 8
Whole batteries	1	— 3
Type metal	16	— 17
Electrotype	13	— 15

Nickel		
Nickel solids	120	—130
Nickel rod ends	120	—130
Nickel sheets, clips	120	—130
Nickel turnings	35	— 45

Zinc		
New zinc clippings	17	— 18
Old diecast zinc	13	— 14

EFFECTIVE JUNE 24, 1985

(Effective June 24 1985) Prices obtained in trade based on representative tonnages per gross ton delivered to consumer unless otherwise stated. Prices are the opinions of Iron Age editors and correspondents, based on contacts with dealers, brokers, generators and users in the industry, on the effective date listed above.

Ferrous Scrap Prices

Pittsburgh

No. 1 hvy. melting	$ 70.00 to	$ 71.00
No. 2 hvy. melting	60.00 to	61.00
No. 1 dealer bundles	79.00 to	80.00
No. 1 factory bundles (auto)	76.00 to	77.00
No. 2 bundles	50.00 to	51.00
No. 1 busheling	77.00 to	78.00
Machine shop turnings	7.00 to	8.00
Shoveling turnings	40.00 to	41.00
Cast iron borings	38.00 to	39.00
Low phos. punchings plate	84.00 to	85.00
Heavy turnings	60.00 to	61.00
No. 1 RR hvy. melting	78.00 to	79.00
Rails, 2 ft. and under	95.00 to	96.00
Scrap rails, random lgth.	82.00 to	83.00
RR specialties	88.00 to	89.00
No. 1 machinery cast	71.00 to	72.00
Cupola cast	64.00 to	65.00
Heavy breakable cast	30.00 to	31.00
Stainless		
18-8 bundles and solids	615.00 to	625.00
18-8 turnings	515.00 to	525.00

Chicago

No. 1 hvy. melting	$ 61.00 to	$ 62.00
No. 2 hvy. melting	57.00 to	58.00
No. 1 dealer bundles	79.00 to	80.00
No. 1 factory bundles (auto)	77.00 to	78.00
No. 2 dealer bundles	49.00 to	50.00
No. 1 busheling	73.00 to	74.00
Shredder scrap	73.00 to	74.00
Machine shop turnings	35.00 to	36.00
Mixed borings and turnings	36.00 to	37.00
Shoveling turnings	38.00 to	39.00
Cast iron borings	39.00 to	40.00
Low phos. forge crop	94.00 to	95.00
Low phos. punchings plate 1/4 in. and heavier	109.00 to	110.00
Low phos. 2 ft. and under	104.00 to	105.00
No. 1 RR hvy. melting	64.00 to	65.00
Scrap rails random lgth.	69.00 to	70.00
Reroller rails	92.00 to	93.00
Rails, 2 ft. and under	95.00 to	96.00
RR couplers and knuckles	84.00 to	85.00
RR car axles	101.00 to	102.00
No. 1 machinery cast	99.00 to	100.00
Cupola cast	87.00 to	88.00
Stove plate	87.00 to	88.00
Steel car wheels	80.00 to	81.00
Stainless		
18-8 bundles and solids	555.00 to	565.00
18-8 turnings	465.00 to	475.00
430 bundles and solids	145.00 to	150.00
430 turnings	115.00 to	120.00

Philadelphia

No. 1 hvy. melting	$ 65.00 to	$ 68.00
No. 2 hvy. melting	58.00 to	61.00
No. 1 dealer bundles	75.00 to	78.00
No. 2 dealer bundles	40.00 to	43.00
No. 1 busheling	75.00 to	78.00
Shredder scrap	80.00 to	83.00
Machine shop turnings	25.00 to	28.00
Mixed borings and turnings	25.00 to	28.00
Shoveling turnings	37.00 to	40.00
Low phos. 5 ft. and under	76.00 to	79.00
Low phos. 2 ft. punchings	94.00 to	97.00
Electric furnace bundles	80.00 to	83.00
RR specialties	76.00 to	79.00
Rails, 2 ft. and under	94.00 to	97.00
Cupola cast	75.00 to	78.00
Heavy breakable cast	53.00 to	56.00
No. 1 machinery cast	90.00 to	93.00

Detroit

Brokers buying prices per gross ton on cars

No. 1 hvy. melting	$ 48.00 to	$ 49.00
No. 2 hvy. melting	47.00 to	48.00
No. 1 dealer bundles	59.00 to	62.00
No. 2 bundles	28.00 to	29.00
No. 1 busheling	58.00 to	59.00
Drop forge flashings	38.00 to	39.00
Machine shop turnings	38.00 to	39.00
Mixed borings and turnings	16.00 to	17.00
Shoveling turnings	39.00 to	40.00
Cast iron borings	23.00 to	24.00
Heavy breakable cast	33.00 to	34.00
Mixed cupola cast	48.00 to	49.00
Automobile cast	72.00 to	73.00
Stainless		
18-8 bundles and solids	520.00 to	530.00
18-8 turnings	415.00 to	425.00
430 bundles and solids	115.00 to	125.00

Youngstown

No. 1 hvy. melting	$ 50.00 to	$ 53.00
No. 2 hvy. melting	39.00 to	42.00
No. 1 dealer bundles	66.00 to	69.00
No. 2 dealer bundles	29.00 to	32.00
Machine shop turnings	8.00 to	11.00
Shoveling turnings	13.00 to	16.00
Low phos. plate	56.00 to	59.00
Electric furnace bundles	53.00 to	56.00
Galvanized bundles	46.00 to	49.00

Cleveland

No. 1 hvy. melting	$ 50.00 to	$ 53.00
No. 2 hvy. melting	30.00 to	33.00
No. 1 dealer bundles	66.00 to	69.00
No. 1 factory bundles	55.00 to	58.00
No. 2 bundles	25.00 to	28.00
No. 1 busheling	69.00 to	72.00
Machine shop turnings	10.00 to	13.00
Mixed borings and turnings	8.00 to	11.00
Shoveling turnings	18.00 to	21.00
Cast iron borings	15.00 to	18.00
Cut structural & plates 2 ft. and under	92.00 to	95.00
Low phos. punchings plate	92.00 to	95.00
Drop forge flashings	43.00 to	46.00
Foundry steel, 2 ft. & under	66.00 to	69.00
No. 1 RR hvy. melting	56.00 to	59.00
Rails, 2 ft. and under	83.00 to	86.00
Rails, 18 in. and under	87.00 to	90.00
Steel axle turnings	56.00 to	59.00
Railroad cast	87.00 to	90.00
No. 1 machinery cast	85.00 to	88.00
Cupola cast	55.00 to	58.00
Stove plate	51.00 to	54.00
Stainless		
18-8 bundles*	375.00 to	385.00
18-8 turnings	325.00 to	335.00
430 bundles	80.00 to	85.00

Buffalo

Brokers buying prices per gross ton on cars

No. 1 hvy. melting	$ 30.00 to	$ 31.00
No. 2 hvy. melting	40.00 to	41.00
No. 1 busheling	62.00 to	63.00
No. 1 dealer bundles	62.00 to	63.00
No. 2 bundles	30.00 to	31.00
Machine shop turnings	15.00 to	16.00
Mixed boring and turnings	15.00 to	16.00
Shoveling turnings	21.00 to	22.00
Cast iron borings	23.00 to	24.00
Low phos. plate	77.00 to	78.00
Structural and plate 2 ft. and under	79.00 to	80.00
Rails, 2 ft. and under	79.00 to	80.00
Scrap rails, random lgth.	65.00 to	66.00
No. 1 machinery cast	76.00 to	77.00
No. 1 cupola cast	58.00 to	59.00

St. Louis

No. 1 hvy. melting	$ 45.00 to	$ 46.00
No. 2 hvy. melting	34.00 to	35.00
Foundry steel, 2 ft.	43.00 to	44.00
No. 1 dealer bundles	45.00 to	46.00
No. 2 bundles	29.00 to	30.00
Machine shop turnings	12.00 to	13.00
Shoveling turnings	18.00 to	19.00
Cast iron borings	28.00 to	29.00
No. 1 RR hvy. melting	48.00 to	49.00
Rails, random length	52.00 to	53.00
Rails, 18 in. and under	65.00 to	66.00
RR specialties	65.00 to	66.00
Cupola cast	71.00 to	72.00
Heavy breakable cast	49.00 to	50.00
Stove plate	86.00 to	87.00
Steel car wheels	75.00 to	76.00
Rerolling rails	64.00 to	65.00
Unstripped motor blocks	58.00 to	59.00

Birmingham

No. 1 hvy. melting	$ 70.00 to	$ 71.00
No. 2 hvy. melting	67.00 to	68.00
No. 1 dealer bundles	71.00 to	72.00
No. 2 bundles	45.00 to	46.00
No. 1 busheling	71.00 to	72.00
Shredder scrap	84.00 to	85.00
Machine shop turnings	25.00 to	26.00
Shoveling turnings	37.00 to	38.00
Cast iron borings	35.00 to	36.00
Electric furnace bundles	66.00 to	67.00
Elec. furnace, 3 ft. & under	66.00 to	67.00
Structural and plate, 2 ft	85.00 to	86.00
Structural and plate, 4 ft	82.00 to	83.00
No. 1 RR hvy. melting	82.00 to	83.00
Scrap rails, random lgth.	77.00 to	78.00
Rails, 2 ft. and under	91.00 to	92.00
Angles and splice bars	83.00 to	84.00
No. 1 cupola cast	82.00 to	83.00
Unstripped motor blocks	75.00 to	76.00

Cincinnati

Brokers buying prices per gross ton on cars

No. 1 hvy. melting	$ 42.00 to	$ 43.00
No. 2 hvy. melting	39.00 to	40.00
No. 1 dealer bundles	43.00 to	44.00
No. 2 bundles	23.00 to	24.00
Machine shop turnings	3.00 to	4.00
Shoveling turnings	5.00 to	6.00
Cast iron borings	12.00 to	13.00
Low phos. 18 in. and under	75.00 to	76.00
Rails, random length	53.00 to	54.00
Rails, 2 ft. and under	67.00 to	68.00
No. 1 cupola cast	53.00 to	54.00
Heavy breakable cast	21.00 to	22.00
Drop broken cast	68.00 to	69.00

New York

Buyers buying prices per gross ton on cars

No. 1 hvy. melting	$ 44.00 to	$ 45.00
No. 2 hvy. melting	35.00 to	36.00
No. 2 dealer bundles	20.00 to	24.00
Mixed borings and turnings	10.00 to	11.00
Machine shop turnings	4.00 to	6.00
Shoveling turnings	10.00 to	12.00
Clean cast, chem. borings	35.00 to	36.00
No. 1 machinery cast	79.00 to	80.00
Mixed yard cast	50.00 to	51.00
Heavy breakable cast	0.00 to	12.00
Stainless		
18-8 prepared solids	520.00 to	540.00
18-8 turnings	420.00 to	440.00
430 prepared solids	90.00 to	110.00
410 solids	80.00 to	90.00

Boston

Brokers buying prices per gross ton on cars

No. 1 hvy. melting	$ 49.00 to	$ 51.00
No. 2 hvy. melting	39.00 to	41.00
No. 1 dealer bundles	51.00 *	53.00
No. 2 bundles	32.00 to	34.00
No. 1 busheling	57.00 to	59.00
Shredder scrap	59.00 to	61.00
Machine shop turnings	10.00 to	12.00
Shoveling turnings	18.00 to	20.00
No. 1 machinery cast	75.00 to	80.00
Mixed cupola cast	42.00 to	44.00
Heavy breakable cast	8.00 to	10.00

San Francisco

No. 1 hvy. melting	$ 38.00 to	$ 40.00
No. 2 hvy. melting	32.00 to	34.00
No. 1 dealer bundles	29.00 to	31.00
No. 2 dealer bundles	17.00 to	19.00
Machine shop turnings	8.00 to	9.00
Cast iron borings	8.00 to	9.00
No. 1 cupola cast	80.00 to	82.00

Los Angeles

No. 1 hvy. melting	$ 40.00 to	$ 42.00
No. 2 hvy. melting	33.00 to	35.00
No. 1 dealer bundles	31.00 to	33.00
No. 2 dealer bundles	16.00 to	18.00
Machine shop turnings	13.00 to	14.00
Shoveling turnings	10.00 to	11.00
Cast iron borings	8.00 to	9.00
Elec. furnace, 1 ft. and under (foundry)	70.00 to	72.00
No. 1 cupola cast	72.00 to	74.00

Seattle

No. 1 hvy. melting	60.00 to	62.00
No. 2 hvy. melting	51.00 to	53.00
No. 2 bundles	35.00 to	37.00
No. 1 cupola cast	89.00 to	90.00
Mixed yard cast	80.00 to	82.00

Hamilton, Ont.

Brokers buying prices per gross ton on cars

No. 1 hvy. melting	$ 71.00
No. 2 hvy. melting, cut 2 ft. and under	63.00
No. 1 dealer bundles	69.00
No. 2 bundles	47.00
Mixed steel scrap	45.00
Bush. new fact. prep'd	71.00
Bush. new fact. unprep'd	62.00
Machine shop turnings	31.00
Short steel turnings	31.00
Mixed borings and turnings	18.00
Cast scrap	67.00

Houston

Brokers buying prices per gross ton on cars

No. 1 hvy. melting	$ 67.00 to	$ 68.00
No. 2 hvy. melting	54.00 to	55.00
No. 2 bundles	40.00 to	41.00
Machine shop turnings	13.00 to	14.00
Crushed turnings	30.00 to	31.00
Shredder scrap	76.00 to	77.00
Cut structural plate, 2 ft. and under	96.00 to	97.00
Cut structural plate, 5 ft. and under	80.00 to	81.00
Unstripped motor blocks	60.00 to	61.00
Cupola cast	84.00 to	85.00

PRICES ON AN EVEN KEEL IN MAY

That headline, believe it or not, was the same statement that appeared on top of this page in May of last year.

That tells a lot about recent price stability in producer goods lines. Over the period from May of last year through May of this year, producer prices moved up by only 1.1 pct. That covers prices as measured by the U.S. Department of Labor's producer price index for finished goods.

Overall, producers' finished goods prices in May moved up 0.2 pct on a seasonally adjusted basis from April. This was about the same as in both March and April. The steepest monthly price increase over the past 15 months was last November's 0.3 pct rise. And in five of the months in that period there was no price movement at all.

In the past, prices of capital equipment tended to move up at a faster pace than for other industrial goods. But lately, capital equipment tags have been in line with other goods. In April and May, prices of capital equipment were unchanged.

One capital item did, however, rock the price boat a lot in May. Note on the table that tags on heavy trucks were down 4.9 pct during the month. This softness is felt to reflect buyer resistance arising from slowed economic growth. Trucks represent investments that can be quickly curtailed by companies in times of slowdown. Truck builders, in an effort to boost sales, eased off on prices in the slowed business months of April and May.

Recent price stability has been good news for buyers and users of producer goods. But for some makers and sellers of those goods, the price-restraint environment has hurt their profit margins. In such a non-inflationary period, they can't get their prices up even as many of their costs continue to rise.

Latest Month Covered: May 1985

Products	Index Reading For Month (1967 = 100)	Pct Change From Previous Month	Pct Change From Year-Ago Month
Metal Cutting Machine Tools	396.7	+ 0.2	+ 3.6
Metal Forming Machine Tools	432.5	0	+ 2.2
Agricultural Machinery & Equip.	339.3	+ 0.1	+ 0.3
Construction Machinery & Equip.	362.4	+ 0.3	+ 1.3
Industrial Process Furnace & Ovens	384.5	+ 0.1	+ 2.7
Industrial Material Handling Equip.	294.5	+ 0.2	+ 2.4
Pumps, Compressors & Allied Equip.	355.5	0	+ 1.9
Fluid Power Equip. (Dec. 1970 = 100)	263.9	0	+ 2.6
Mechanical Power Transmission Equip.	338.1	+ 0.1	+ 4.4
Automobiles	228.1	+ 0.5	+ 3.1
Motor Trucks—Light	295.5	— 0.2	+ 4.7
Motor Trucks—Heavy	316.1	— 4.9	— 5.6
Railroad Equipment	362.6	— 0.4	+ 2.3
Fabricated Metal Structural Products	314.7	+ 0.1	+ 1.3
Electric Motors	352.0	+ 0.4	+ 3.5
Valves & Fittings (Dec. 1982 = 100)	104.6	+ 0.2	+ 2.5
Ball & Roller Bearings	347.1	0	+ 2.0
Cutting Tools & Accessories	286.0	0	+ 2.9
Heating Equipment	258.4	+ 0.2	+ 2.4
Plumbing Fixtures & Brass Fittings	312.7	+ 0.4	+ 3.7
Metal Containers	358.2	+ 0.1	+ 2.9
Miscellaneous Metal Products	301.8	— 0.1	+ 2.9

Data based on U.S. Labor Dept.'s Producer Price Index